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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,882	12/29/2000	Gralf Gaedeken	450117-02963	8380
20999	7590	07/15/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			JONES, PRENELL P	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/751,882

Applicant(s)

GAEDEKEN ET AL.

Examiner

Prenell P. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 48-67 and 86-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 48-67 and 86-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments with respect to claims 48-67 and 86-96 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 48-50, 52 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito et al.

Regarding claim 48, Saito discloses a portal for interfacing a first data bus to a data interface (Fig. 3, ATM, guide server, switch router/ATM network/NIU/1394 bus/gateway or bridge and video terminal consist of physical ports/portal directly/indirectly interfacing between various nodes/devices, which are FANP nodes/device, wherein first 1394 bus 112 has a physical port that interconnects NIU/interface and gateway/bridge, col. 28, line 30-35) comprising: uplink means (Fig. 30, upstream nodes (FANP nodes, such as gateway 105) recognized downstream node

(NIU) transmitting data via 1394 bus (which has a port/portal interfacing) on the uplink, col. 30, line 8-65, col. 40, line 9-35) configured and adapted for receiving data packets from the data bus (Fig. 3, 1394 gateway 105 recognize that data has come from the NIU of the first bus 112, therefore the NIU transmits data to gateway 105, whereby the data has to travel (be received by 1394 port) to the first 1394 bus 112 via a physical port in order to get to gateway 105, col. 30, line 8-65) each of the data packet is associated with one of a plurality of channels (Fig. 31, plurality of VCs/ plurality channels between guide server and cell router) determining the channel with which each data packet is associated with (Fig. 31, physical port of router and physical port of 1394 bus is associated with ATM network as to determine the VC for transmitting packet, packet is recognized and allowed to pass via VC routing table for transferring data, determining for each packet its respective VC channel, col. 24, line 38-51, line 64-67, col. 25, line 7-36, col. 26, line 22-46, col. 28, line 8-57), and transmitting only those of the data received onto the interface that are associated with a channel that extends across the interface (after determination of VC is established, switch router transmits packet through VC, and packet reaches video terminal through gateway 105 (channel extends across interfaces (NIU, gateway), so that packet reaches destination/video terminal), col. 25, line 16-36, col. 26, line 13-30).

Regarding claim 49, Saito further disclose a plurality of isochronous channels (providing flow for isochronous data) is established (col. 17, line 7-13).

Regarding claim 50, Saito discloses the buses utilized are of IEEE 1394 standard (col. 9, line 57 thru col. 10, line 67).

Regarding claim 52, Saito further discloses established isochronous channel and 1394 gateway (bridge/data interface) (col. 28, line 41-57).

Regarding claim 54, Saito further discloses the cable associated with the IEEE1394 can be coaxial or fiber optical (col. 49, line 1-24).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 51, 55, 56, 62, 66, 67, 91, 95 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al in view of Banks et al.

Regarding claims 51, 62 and 91, as indicated above, Saito discloses data distribution system that implements a home network communication environment wherein the architecture includes an ATM/1394 transfer unit (data link interface), router, network interface unit (NIU), IEEE1394 buses, and (col. 42, line 17-18) 1394 gateway/bridge all interconnected via (col. 28, line 30-35, col. 73, line 57 thru col. 74, line 67) port interfaces of 1394 buses (first/second bus), router and ATM, (col. 17, line 7-13) wherein a plurality of isochronous and asynchronous channels (providing flow for isochronous and asynchronous data) is established. Saito is silent on a data interface/bridge implementing a loop-free network. However, in a communication environment that utilize bridging between networks, and at the same time utilizing IEEE 1394 communication standard, Banks discloses (Abstract, col. 5, line 14-67, col. 15, line 33-67) a communication architecture that includes bridges connecting between network segments with data links whereby ports act as interfaces between bridges and segments, wherein the segments are IEEE1394 buses, and utilization of 802.3/spanning tree algorithm that allows bridges to discover a loop-free topology. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

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invention to be motivated to implement a loop-free topology as taught by Banks with the teachings of Saito for the purpose of further managing communication routing and limit routing and assignment problems and to globally re-assigning identifiers when a bus resets.

Regarding claims 55, 56, 66, 67, 95 and 96, as indicated above, Saito discloses data distribution system that implements a home network communication environment wherein the architecture includes an ATM/1394 transfer unit (data link interface), router, network interface unit (NIU), IEEE1394 buses, and (col. 42, line 17-18) 1394 gateway/bridge all interconnected via (col. 28, line 30-35, col. 73, line 57 thru col. 74, line 67) port interfaces of 1394 buses (first/second bus), router and ATM, (col. 17, line 7-13) wherein a plurality of isochronous and asynchronous channels (providing flow for isochronous and asynchronous data) is established. Saito is silent on a data discarding packets not associated with bridge or match destination identifier. However, in a communication environment that utilize bridging between networks, and at the same time utilizing IEEE 1394 communication standard, Banks discloses (Abstract, col. 5, line 14-67, col. 15, line 33-67) a communication architecture that includes bridges connecting between network, (col. 6, line 49-61) a bridge that includes a mechanism that enables the removal of obsolete entries in the memory/storage table which include port identifier (destination identifier) and, port identifier are removed from memory. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of the invention to be motivated to implement removing obsolete data entries as taught by

Banks with the teachings of Saito for the purpose of freeing up space in storage and minimize slowing down bridge operations.

7. Claims 53, 64 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al in view of Hulyalkar.

Regarding claims 53, 64 and 93, as indicated above, Saito discloses data distribution system that implements a home network communication environment wherein the architecture includes an ATM/1394 transfer unit (data link interface), router, network interface unit (NIU), IEEE1394 buses, and (col. 42, line 17-18) 1394 gateway/bridge all interconnected via (col. 28, line 30-35, col. 73, line 57 thru col. 74, line 67) port interfaces of 1394 buses, router and ATM, (col. 17, line 7-13) wherein a plurality of isochronous channels (providing flow for isochronous data) is established. Saito is silent on a wireless bridge. In a communication system that utilize bridging to synchronize local buses, wherein the buses/bridges are preferably of the IEEE 1394 standard, Hulyalkar discloses (Abstract, Fig. 1, 2, col. 3, line 30 thru col. 7, line 65) a bus bridge with distribution to a plurality of portals for providing synchronization, wherein the architecture includes multiple switches interconnected to multiple bridge portals, whereby the bridge portal is 1394 serial bus bridge. Hulyalkar further (col. 6, line 10-65) utilizes wireless IEEE 1394 serial bus bridge in association with the (col. 5, line 30-42) wireless switching system (wireless ATM), (col. 5, line 30-42) wherein isochronous routing of data packets is supported by IEEE 1394. Therefore, it would have been



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obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement a wireless bridge as taught by Hulyalkar with the teachings of Saito for the purpose of further accommodating frame based synchronization in a compatible communication system that utilizes IEEE 1394 standard.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

July 12, 2005



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